Message

From: Medina-Vera, Myriam [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=B081A1F48A044B4C9D1EBC4992C54DEE-MEDINA-VERA, MYRIAM]
Sent: 6/19/2017 11:21:29 AM
To: Strynar, Mark [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=5a9910d5b38e471497bd875fd329a20a-Strynar, Mark]
Subject: ACTION: Follow-up Some GenX info

Importance: High

Mark,

This is interesting. It seems that the state sampling starts this week for the next 3 weeks. The request is to do the analyses of split samples. Considering that there is also a request for you to travel- is it something that you can do?

Myriam Medina-Vera, Ph.D.
Chief PHCB/EMMD/NERL
Research Triangle Park, NC
Voice: 919-541-5016
Fax: 919-541-3527

From: Orme-Zavaleta, Jennifer
Sent: Friday, June 16, 2017 2:11 PM
To: Strynar, Mark <Strynar.Mark@epa.gov>
Cc: Buckley, Timothy <Buckley.Timothy@epa.gov>; Medina-Vera, Myriam <Medina-Vera.Myriam@epa.gov>
Subject: Fwd: Follow-up Some GenX info

Mark, you able to do this?

Jennifer Orme-Zavaleta, PhD
Director, National Exposure Research Laboratory
USEPA
RTP, NC
Personal Phone / Ex. 6

Begin forwarded message:

> **From:** "Allenbach, Becky" <Allenbach.Becky@epa.gov>
> **Date:** June 16, 2017 at 2:07:04 PM EDT
> **To:** "Orme-Zavaleta, Jennifer" <Orme-Zavaleta.Jennifer@epa.gov>, "Buckley, Timothy" <Buckley.Timothy@epa.gov>, "Medina-Vera, Myriam" <Medina-Vera.Myriam@epa.gov>, "Biales, Adam" <Biales.Adam@epa.gov>, "Guiseppi-Elie, Annette" <Guiseppi-Elie.Annette@epa.gov>, "Walker, Mary" <walker.mary@epa.gov>, "Kemker, Carol" <Kemker.Carol@epa.gov>, "Strynar, Mark" <Strynar.Mark@epa.gov>, "Lindstrom, Andrew" <Lindstrom.Andrew@epa.gov>, "Sinks, Tom" <Sinks.Tom@epa.gov>, "Flowers, Lynn" <Flowers.Lynn@epa.gov>, "Hall, Renea" <Hall.Renea@epa.gov>, "Campbell-Dunbar, Shawneille" <Campbell-Dunbar.Shawneille@epa.gov>, "Elliott, Richard" <Elliott.Richard@epa.gov>, "Maguire, Megan" <Maguire.Megan@epa.gov>, "Mitchell, Ken" <Mitchell.Ken@epa.gov>, "Mundrick, Doug" <Mundrick.Doug@epa.gov>, "Gettle, Jeaneanne" <Gettle.Jeaneanne@epa.gov>, "Simpson, Timothy" <Simpson.Timothy@epa.gov>, "Sivertsen, Scott" <Sivertsen.Scott@epa.gov>
> **Cc:** "Hubbard, Carolyn" <Hubbard.Carolyn@epa.gov>, "Kavlock, Robert" <Kavlock.Robert@epa.gov>, "Flowers, Lynn" <Flowers.Lynn@epa.gov>, "Impellitteri, Christopher"

<Impellitteri.Christopher@epa.gov>, "Bush, William" <Bush.William@epa.gov>
Subject: Follow-up Some GenX info

Thank you Jennifer.

We had a call with North Carolina yesterday where they let us know that they plan to take 12 samples per week for a 3 week period beginning next week of both surface water and finished drinking water. Chemours has offered to pay for the analysis using a commercial lab in Colorado, but they state thinks it best to split samples and conduct separate analysis. I agree.

So, there will conservatively be less than 50 samples we are asking you to analyze. Either we will ask the company for the test method or NC will to insure that they are being analyzed in the same manner for comparison. Does this work? Should we have them contact Mark about the sampling precautions that need to take place with the PFASs?

Becky

Becky B. Allenbach, Acting Deputy Director
Water Protection Division
EPA Region 4 – Atlanta
Office: 404-562-9687
Personal Phone / Ex. 6

From: Orme-Zavaleta, Jennifer
Sent: Thursday, June 15, 2017 4:01 PM
To: Allenbach, Becky <Allenbach.Becky@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>; Medina-Vera, Myriam <Medina-Vera.Myriam@epa.gov>; Biales, Adam <Biales.Adam@epa.gov>; Guiseppi-Elie, Annette <Guiseppi-Elie.Annette@epa.gov>; Walker, Mary <walker.mary@epa.gov>; Kemker, Carol <Kemker.Carol@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>; Sinks, Tom <Sinks.Tom@epa.gov>; Flowers, Lynn <Flowers.Lynn@epa.gov>; Hall, Renea <Hall.Renea@epa.gov>; Campbell-Dunbar, Shawneille <Campbell-Dunbar.Shawneille@epa.gov>; Elliott, Richard <Elliott.Richard@epa.gov>; Maguire, Megan <Maguire.Megan@epa.gov>; Mitchell, Ken <Mitchell.Ken@epa.gov>; Mundrick, Doug <Mundrick.Doug@epa.gov>; Gettle, Jeaneanne <Gettle.Jeaneanne@epa.gov>; Simpson, Timothy <Simpson.Timothy@epa.gov>; Sivertsen, Scott <Sivertsen.Scott@epa.gov>
Cc: Hubbard, Carolyn <Hubbard.Carolyn@epa.gov>; Kavlock, Robert <Kavlock.Robert@epa.gov>; Flowers, Lynn <Flowers.Lynn@epa.gov>; Impellitteri, Christopher <Impellitteri.Christopher@epa.gov>
Subject: FW: Some GenX info
Importance: High

Hi all, thanks again for making time to talk today.

As a follow up pls see the attached and the info below. Let us know what questions you have or additional information you need.

Also, let us know if the SESD staff want to meet with Mark in Athens June 26-27

Thanks!

jennifer

Jennifer Orme-Zavaleta, PhD
Director, National Exposure Research Laboratory

USEPA Office of Research and Development
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RTP, NC 27711

Personal Phone / Ex. 6

orme-zavaleta.jennifer@epa.gov

From: Strynar, Mark
Sent: Thursday, June 15, 2017 3:33 PM
To: Orme-Zavaleta, Jennifer <Orme-Zavaleta.Jennifer@epa.gov>; Guiseppi-Elie, Annette <Guiseppi-Elie.Annette@epa.gov>
Cc: Medina-Vera, Myriam <Medina-Vera.Myriam@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>
Subject: Some GenX info

Jennifer please pass on to those on the call. You can find info on each of these compounds on the US EPA Comptox Chemistry Dashboard.

All,

1) Per the attached non-CBI GenX brochure (attached) from DuPont the compound being called GenX is the processing aid with the structural formula $CF_3CF_2CF_2OCF(CF_3)COOH.NH_3$

This is the ammonium salt of the processing aid. This is much like PFOA can exist as the free anion (PFO-) or as the ammonium salt (APFO). As these will both exist as the anionic form in water, they cannot be measured separately. Mant other PFAS exist in salt forms as well for usiage but as anions when analyzed for (PFOS-K, PFOS-NH4, PFOA-Na…)

The CAS for the GenX ammonium salt is CAS 62037-80-3
https://comptox.epa.gov/dashboard/dsstoxdb/results?utf8=%E2%9C%93&search=62037-80-3

The free acid for has the CAS 13252-13-6
Called undecafluoro-2-methyl-3-oxahexanoic acid
https://comptox.epa.gov/dashboard/dsstoxdb/results?utf8=%E2%9C%93&search=13252-13-6

Also per the brochure the "DuPont resin manufacturing process includes the thermal transformation of the GenX processing aid into a hydrophobic water-insoluble hydride (CAS Number 3330-15-2)". This is essentially the decarboxylation of the GenX acid. As this analyte is no longer an acid we do not see it. It is also more likely a GC amenable compound.
https://comptox.epa.gov/dashboard/dsstoxdb/results?utf8=%E2%9C%93&search=3330-15-2

2) Per the EPA sanitized PMN consent order it appears the 2 compounds are the free acid and ammonium salt form of the GenX compound (see attached)
3) The data from the Sun et al., 2016 paper is in the Science Hub (https://sciencehub.epa.gov/sciencehub/research_efforts/408/datasets/395)
4) Find attached the Sun et al., 2016 paper and the SI.

Please let me know if you have any further questions.
Mark

Dr. Mark J. Strynar
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